Subject Index
Volume 46

Abdomen, distribution of adipose tissue accumulation, estimation from simple anthropometric measurements, 471
Absorptiometry, dual-photon, spinal bone density in healthy postmenopausal females, 927
Absorption
  iron
    calcium supplementation and (*letter*), 607
    low-phytate barley fiber concentrate and, 553
    manganese and zinc and, 152
    nonheme, species differences, 723
  vitamin D, in short bowel, 548
Acetate, need for in neonates on cysteine-supplemented TPN, 565
Acetylcholine receptor, in muscle cell cultures, ascorbic acid-induced collagen secretion and (rat), 1184S
Acidosis, neonatal, cysteine-supplemented TPN and, 565
Adipose tissue
  deep abdominal accumulation, estimation from simple anthropometric measurements, 471
  quantitation and distribution, magnetic resonance imaging, 18
  subcutaneous, fatty acid composition, diet and, 340
  white, essential fatty acid composition, human colostrum EFA composition vs, 829
Adolescence
  age at menarche, nutrient intake and, 649
  calcium absorption efficiency and requirements, 261S
  calcium metabolism and requirements, 245S
  influence of calcium intake and growth indexes on vertebral bone mineral density in females, 425
  iron requirements and menstruation, 1047
  plasma retinol, β-carotene, and α-tocopherol during, 884
Adrenal medulla, ascorbate secretion, 1163S
Adriamycin, toxicity, ascorbic acid and (animals), 1298S
Age/aging
  gestational, birth weight and, 657
  nutrient intake and age at menarche, 649
  sensory-specific satiety and, 988
Albumin, serum, TPN and, in bone-marrow transplant recipient, 1087
Alcohol
  consumption
    diet and obesity and, 49
    energy deficit and, 976
    osteoporotic fractures and, 157
  metabolism, missing calories in, 47
Alkaline phosphatase, chondrocytes, ascorbic acid and, 1209S
Aluminum, in parenteral nutrition solutions (*letter*), 612, 951
Amidation, ascorbic acid and, 1153S
Amino acids. *See also specific amino acids*
  branched-chain amino acid interactions, 395, 402
  plasma free, postprandial changes, 1017
  sulfur, requirement in adults, 377, 386
Anemia
  iron-deficiency
    detection in pregnancy, 1077
    lymphocyte proliferation in, 944
  iron status and, 1071
Anorectic drugs, fluoxetine, 321
Anthropometry
  error in nomograms for estimating body mass index, 435
  estimation of deep abdominal adipose tissue accumulation, 471
  influence on measurements of pregnancy outcome and neonatal behavioral organization, 657
Antioxidants. *See also* Vitamin C; Vitamin E
  serum urate, 1129S
Apolipoprotein(s)
  plasma, n-3 fatty acids and, 118
  serum, polyunsaturated fatty acid-enriched diet and, 104
Apolipoprotein B
  in normotriglyceridemic subjects, dietary fish and, 334
  plasma levels, coffee and, 599
Apolipoprotein B-100, response to oat bran/wheat bran intake, in hypercholesterolemic men, 678
Arachidonic acid, in platelet phospholipids, dietary fatty acids and, 351
Arthritis, n-3 polyunsaturated fatty acids in, 438
ASCN/ASPEN Working Group on Standards for Aluminum Content of Parenteral Nutrition Solutions Report (*letter*), 612
Ascorbate. *See* Ascorbic acid
Ascorbic acid. *See also* Vitamin C
  accumulation, in cultured human skin fibroblasts, 1144S
  adriamycin toxicity and (animals), 1298S
  anti-HIV activities, 1231S
  L-ascorbic acid-modulated growth of human leukemic, preleukemic, and myeloma progenitor cells, 1241S
  cancer and, epidemiologic evidence, 1310S
  carnitine biosynthesis and, 1147S
  cartilage cell metabolism and, 1209S
  collagen secretion and, acetylcholine receptor regulation in muscle cell cultures and (rat), 1184S
  collagen synthesis and, 1141S, 1144S
  complement C1q activity and (guinea pig), 1228S
  copper transport and, 1193S
  cytochrome b561 and, 1173S
  dietary, fecal mutagen elimination and, 1302S
  in dopamine β-hydroxylation, 1163S
  estrogen-induced renal tumors and (hamster), 1256S
  in eye, 1198S
  in foods, sample variability, 1323S
  inhibition of methylcholanthrene-induced transformation in C3H/10T1/2 cells, 1236S
  inhibitory effect on human mammary tumor xenografts, 1274S
  iron metabolism and, 1188S
  multicompartmental secretion, 1163S
  neuroendocrine peptide synthesis and, 1153S
  neutrophil bactericidal activity and (animals), 1214S
  in neutrophils, 1221S
  norepinephrine synthesis and, 1157S
  as oxygen free radical scavenger, 1119S
  phorbol ester-induced skin-tumor promotion and (mouse), 1266S
  plasma, 712, 1315S
    analysis of, dietary erythorbic acid and, 1319S
    interleukin-2 and lymphokine-activated killer cell therapy and, 1292S
  prooxidant activity, 1125S

protection against oxidative damage to lipids in plasma and low-density lipoproteins, 1113S
protein oxidation and, 1125S
proton-electron transfer with cytochrome b561, 1179S
radiation effects on bone marrow, skin, and tumor and (mouse), 1281S
regeneration, 1163S
requirements
in situ kinetics approach, 1157S
for procollagen hydroxylation and secretion, 1135S
Rous sarcoma virus replication and oncogenic transformation of cell culture and, 1247S
serum, 712, 1315S
serum urate as antioxidant for, 1129S
spontaneous mammary tumors and (mouse), 1252S
synthesis, gulonolactone oxidase deficiency and, 1203S
transport, in cultured human skin fibroblasts, 1144S
treatment of experimental transplanted melanoma (mouse), 1284S
UV-light-induced skin tumors and (mouse), 1252S
vitamin B-12 plus, in Ehrlich carcinoma and L1210 leukemia (mouse), 1261S
Ascorbyl palmitate
adriamycin toxicity and (animals), 1298S
phorbol ester-induced skin-tumor promotion and (mouse), 1266S
Atherosclerosis, oxidized low-density lipoprotein in, 701
Autoimmune disorders, n-3 polyunsaturated fatty acids in, 438

Bakery products, wheat-based, hypocholesterolemic effects, 836
Barley fiber, low-phytate, effect on calcium, magnesium, zinc and iron balances, 553
Bed rest, experimental diet and, protein turnover in (*letter*), 607
Beef tallow, dietary, effects on serum lipids and lipoproteins, 1036
Behavior, neonatal, determinants of, 657
Betaine, supplementation, effect on methionine transmethylation and homocysteine remethylation in adult males, 386
Bifidobacterium bifidus, effect on in vivo lactose digestion, 1041
Bile salts, intraluminal concentration, vitamin D absorption in Crohn's disease and intestinal resection and, 548
Bilirubin, intravenous lipid infusions and, in premature infant, 1024
Bioelectrical impedance analysis (BIA)
body composition of low-birth-weight infants, 296
multiple-frequency, extracellular and total body water, 26
validity, in measuring changes in lean body mass during weight reduction, 970
Bioelectrical reactance, extracellular water in low-birth-weight infants and, 296
Bioelectrical resistance, total body water in low-birth-weight infants and, 296
Biological variation, iron status indices, 729
Biomarkers, application to studies of cancer prevention in gastrointestinal tract, 188S
Birth weight, predictors of, 657
Blood pressure
dietary calcium and, 215S
meat consumption and, 930
n-3 PUFA-enriched eggs and, 689
Body composition
body-water compartments, multiple-frequency bioelectrical impedance analysis, 26
changes in diet composition and, 10
changes in lean body mass during weight reduction, 970
effects of obesity and non-insulin-dependent diabetes, 509
energy expenditure and, 963
low-birth-weight infants, bioelectrical resistance and reactance measurements, 296
low-fat diet and, 304
mineral composition, calcium and phosphorus deficiency and (piglet), 420
resting energy expenditure and, in chronic obstructive pulmonary disease, 983
very-low-calorie diet and physical training regimens and, 56
Body fat
distribution
estimation from simple anthropometric measurements, 471
magnetic resonance imaging, 623
plasma retinol, β-carotene, and α-tocopherol during adolescence and, 884
Body mass index
alcohol intake and, 49
glucose intolerance in elderly and, 136
nomogram for determining, error in, 435
reference data for obesity, 85th and 95th percentiles of body mass index, 773
Body size, meat consumption and, 930
Body water, total
low-birth-weight infants, bioelectrical resistance and, 296
multiple-frequency bioelectrical impedance analysis, 26
Bone
calcium accretion, in children and adolescents, 261S
calcium loss, relation to dermal, intestinal and renal obligatory loss of calcium, 266S
formation, calcium metabolism and requirements during, 245S
turnover, dietary calcium and, 266S
Bone disease, metabolic, 179S
Bone loss, calcium supplementation and, 274S
Bone marrow
radiation effects, ascorbic acid and (mouse), 1281S
transplantation, TPN in, metabolic homeostasis and, 1087
Bone mass, peak
calcium metabolism and requirements and, 245S
calcium nutrition during adolescence and, 425
evolutionary perspective, 281S
Bone mineral density
in premenopausal women (*letter*), 169
vertebral
calcium intake and
in adolescent females, 425
in healthy postmenopausal women, 927
in premenopausal vegetarian and nonvegetarian females, 1005
Book reviews
Exercise Physiology: Energy, Nutrition and Human Performance (ed 3), WD McArdle, FI Katch, VL Katch, 175
Health Effects of ω3 Polyunsaturated Fatty Acids in Seafoods, AP Simopoulos, et al (eds), 175
Mediterranean Diets in Health and Disease, GA Spiller (ed), 771
Protein Nutrition and Mineral Absorption, PA Wapnir, 175
Breast-feeding, energy requirements during, 526
Breath tests. *See* Hydrogen breath test; Methane breath test
Burns
in children, energy requirements and, 35
proline metabolism in, 408
γ-Butyrobetaine hydroxylase, ascorbic acid and, 1147S

Caffeine, dietary, osteoporotic fractures and, 157
Calcitonin, vascular actions, 220S
Calcitonin gene-related peptide, vascular actions, 220S
Calcium
application for '90s: introduction, objectives, and acknowledgements, 177S
balance
low-phytate barley fiber and, 553
skeletal modeling and consolidation of bone mass and, 245S
deficiency, body mineral composition and (piglet), 420
dietary
blood pressure and, 215S
bone turnover and, 266S
colonic hyperproliferation and (rodent), 209S
colorectal cancer morbidity and mortality and, 193S
mammary gland cancer and (rat), 206S
modulating effects on colorectal cancer, 202S
NaCl-sensitive hypertension and (rat), 227S
osteoporotic fractures and, 242S
vertebral bone mineral density and
in adolescent females, 425
in healthy postmenopausal females, 927
in disease prevention and treatment, 179S
evolutionary perspective, 281S
intestinal transport, blood pressure and, 215S
ionized, in human milk, 69

in metabolic bone disease, 179S
nutrition research in clinical setting, 179S
obligatory losses
calcium requirements and, 261S
relation to skeletal calcium loss, 266S
requirements
in children and adolescents, calcium absorption efficiency, skeletal accretion, and obligatory losses and, 261S
skeletal modeling and consolidation of bone mass and, 245S
research areas, 288S
retention, in premature infants on TPN, calcium glycerophosphate vs conventional mineral salts for, 903
supplementation
bone loss and, 274S
human milk, manganese absorption and, 1065
iron absorption and (*letter*), 607
in pregnancy, hypertension and prematurity and, 237S
Calcium glycerophosphate, for TPN in premature infants, 903
Calorimetry
energy expenditure and reported energy intake in people predisposed to obesity, 506
indirect
carbohydrates with different glycemic indices, 855
computerized indirect calorimeter for use in mechanically ventilated neonates, 30
diet composition and nutrient balance, 10
energy expenditure in burned children, 35
energy requirements during lactation, 526
oral supplementation in home parenteral nutrition and substrate utilization, 560
Cancer
ascorbic acid and, 1252S
epidemiologic evidence, 1310S
combination ascorbic acid and vitamin B-12 therapy in Ehrlich carcinoma and L1210 leukemia (mouse), 1261S
estrogen-induced, ascorbic acid in (hamster), 1256S
n-3 polyunsaturated fatty acids in, 438
Cancer prevention
ascorbic acid-induced inhibition of chemical transformation in C3H/10T1/2 cells, 1236S
gastrointestinal tract, biomarkers in, 188S
Canola oil, dietary
effects on serum lipids and apolipoproteins in healthy men, 104
platelet function, thromboxane production, and phospholipid fatty acid composition and, 351
Carbohydrate(s)
dietary intake
alcohol intake and, 49
glucose intolerance in elderly and, 136
glycemic index, 846
metabolic effects, in insulin-dependent diabetes, 936
metabolism
in non-insulin-dependent diabetes, low-fat, high-carbohydrate diet vs high monounsaturated fatty acid diet and, 586
propionate and, 860
preexercise feeding, performance and, 866
Carbon dioxide production, in mechanically ventilated neonates, computerized indirect calorimetry, 30
Carcinogenesis
ascorbic acid-induced inhibition of chemical transformation in C3H/10T1/2 cells, 1236S
Rous sarcoma virus replication and oncogenic transformation of cell culture, ascorbate and, 1247S
Cardiovascular disease, n-3 polyunsaturated fatty acids in, 438
Carnitine
biosynthesis, ascorbic acid and, 1147S
dietary, effects on carnitine concentrations in urine and milk in lactating females, 814
β-Carotene
effects on serum lipoproteins and immunologic indices (*letter*), 609
lymphocyte subpopulations in elderly and (*letter*), 432
plasma, in adolescence, 884
plasma response, in Guatemalan shoolchildren, 539
Cartilage cells, metabolic activities, ascorbic acid and, 1209S
Cell proliferation
colonic
diet and (rodent), 209S
modulating effects of calcium, 202S
gastrointestinal tract, cancer and, 188S
Cellular immunity, energy deprivation and, 123
Ceruloplasmin, ascorbic acid and, 1193S
Chemotherapy, hypovitaminosis C and, 1292S
Chloride, in human milk, 69
Cholecalciferol, intestinal absorption, in Crohn's disease and intestinal resection, 548
Cholesterol
high-density-lipoprotein (HDL), polyunsaturated fatty acid-enriched diet and, 104
low-density-lipoprotein (LDL)
colonic fermentation and, 141
in normotriglyceridemic subjects, dietary fish and, 334
oat bran and, 841
polyunsaturated fatty acid-enriched diet and, 104
response to oat bran/wheat bran intake, in hypercholesterolemic men, 678
meat consumption and, 930
plasma
coffee and, 599
fish oil +/- vitamin E and, 684
low-fat, high-carbohydrate diet vs high monounsaturated fatty acid diet and, in non-insulin-dependent diabetes, 586
n-3 PUFA-enriched eggs and, 689
in pediatric familial hypercholesterolemia, effect of soy protein on, 98
plasma retinol, β-carotene, and α-tocopherol during adolescence and, 884
serum
polyunsaturated fatty acid-enriched diet and, 104
response to oat bran/wheat bran intake, in hypercholesterolemic men, 678
wheat-based bakery products and, 836
Cholestyramine, oropharyngeal cancers and (*letter*), 429
Chondrocytes, metabolic activities, ascorbic acid and, 1209S
Chromatography, high-preformance liquid (HPLC)
ascorbic acid and dehydroascorbic acid in neutrophils, 1221S
ascorbic acid and dehydroascorbic acid in plasma and serum, 712
Chromium, requirement, 909
Cigarette smoking
breast-milk volume and, 1011
oxidative damage and, ascorbic acid in, 1113S
Clinical Nutrition Research Unit, 179S
Cocoa butter, dietary, effects on serum lipids and lipoproteins, 1036
Coffee, plasma lipoprotein, cholesterol, apolipoproteins, and lipase activity and, 599
Collagen
secretion, ascorbic acid-induced, acetylcholine receptor regulation in muscle cell cultures and (rat), 1184S
synthesis
ascorbic acid and, 1141S, 1144S
in scurvy, insulin-like growth factors and, 1135S
type X, ascorbic acid and, 1209S
Collagen gene, expression, ascorbic acid and, 1141S
Colon
cancer. *See* Colorectal cancer
fermentation, serum lipids and, 141
hyperproliferation, diet and (rodent), 209S
Colony-forming assay, L-ascorbic acid-modulated growth of human leukemic, preleukemic, and myeloma progenitor cells, 1241S
Colorectal cancer
calcium and vitamin D in, 193S
modulating effects of calcium, 202S
risk, phytate and (*letter*), 762
Colostrum, human, essential fatty acid composition, adipose tissue composition vs, 829
Compartmental analysis, selenium utilization, 917
Complement system, C1q activity, ascorbic acid status and (guinea pig), 1228S

Computed tomography (CT scan), effects of obesity and non-insulin-dependent diabetes on skeletal muscle, 509
Computers, nutrient-calculation software, evaluation of nutrient database, 7
Copper
  ascorbic acid prooxidant activity and, 1125S
  metabolism
    ascorbic acid and, 1193S
    vitamin B-6 deficiency and, 1059
  plasma, in rheumatoid arthritis, diet and, 1082
Cord blood, phospholipid essential fatty acid status, in cystic fibrosis, 1029
Coronary Artery Risk Development in Young Adults (CARDIA study), meat consumption and its associations with other diet and health factors, 930
Coronary heart disease, risk factors
  dietary changes and, in Crete, 591
  fish oil ingestion and (*letter*), 610
  lipid responses to oat bran/wheat bran intake, in hypercholesterolemic men, 678
  n-3 fatty acids and, 118
Cortisol, plasma, fish oil +/- vitamin E and, 684
Cysteine, supplementation, in TPN, acid-base homeostasis in neonate and, 565
Cystic fibrosis, essential fatty acid status and fluidity of plasma phospholipids in, 1029
Cytochrome b561
  ascorbic acid and, 1173S
  proton-electron transfer with ascorbic acid, 1179S

Dairy products, strain of lactic acid bacteria in, effect on in vivo lactose digestion, 1041
Dehydroascorbic acid
  in foods, sample variability, 1323S
  in neutrophils, 1221S
  plasma, 712, 1315S
  serum, 712, 1315S
Dehydroepiandrosterone sulphate (DHEA-S), plasma, fish oil +/- vitamin E and, 684
Dental disorders, ascorbic acid and (animals), 1214S
Deuterium dilution technique, smoking and breast-milk volume, 1011
Diabetes mellitus
  body fat distribution in, magnetic resonance imaging, 623
  insulin-dependent, metabolic effects of high-carbohydrate, high-fiber diets, 936
  low-glycemic index diet in, 846
  non-insulin-dependent
    effect on skeletal muscle mass, 509
    in elderly, carbohydrate intake and body mass index and, 136
    low-fat, high-carbohydrate diet vs high monounsaturated fatty acid diet in, 586
  n-3 polyunsaturated fatty acids in, 438
Diarrhea
  acute/persistent, infant-feeding practices and, 745
  vitamin A supplementation and, in children in southern India, 568
Diet
  age at menarche and, 649
  alcohol intake and, 49
  betaine supplementation, effect on methionine transmethylation and homocysteine remethylation in adult males, 386
  changes in, coronary-heart-disease risk-factor status in Crete and, 591
  colonic hyperproliferation and (rodent), 209S
  composition, weight loss and, 821
  experimental, bed rest and, protein turnover in (*letter*), 607
  fatty acid composition of subcutaneous adipose tissue and, 340
  fish in. *See* Fish diet; Fish oil
  high-carbohydrate, high-fiber, metabolic effects for insulin-dependent diabetics, 936
  iron bioavailability, iron requirements in menstruating females and, 1047
  in iron nutrition, species differences, 723
  lipid-lowering, in patients taking pravastatin, 696
  low-fat
    body weight and body composition and, 3043
    weight loss and, 821
  low-fat, high-carbohydrate diet vs high monounsaturated fatty acid diet, in non-insulin-dependent diabetes, carbohydrate and lipid metabolism and, 586
  low-glycemic index, 846
  mammary gland cancer and (rat), 206S
  oleate-rich, susceptibility of LDL to oxidative modification and, 701
  osteoporosis and, assessment methods in, 182S
  plasma zinc and copper concentrations in rheumatoid arthritis and, 1082
  sexual maturation in pubertal girls and, 805
  supplementation, work performance and (*letter*), 608
    traditional Japanese, urinary excretion of lignans and isoflavonoid phytoestrogens and, 1093
  trans fatty acid availability in US diet, 363
  urinary hormonal concentration and spinal bone densities of premenopausal vegetarian and nonvegetarian females and, 1005
  very-low-calorie
    body composition and resting metabolic rate and, 56
    body fat distribution and, magnetic resonance imaging, 623
    changes in lean body mass and, 970
  very-low-energy, changes in circulating leukocytes and mitogen responses and, 123
Dietary intake
  meat consumption and its association with other diet and health factors in young adults, 930
  plasma retinol, β-carotene, and α-tocopherol during adolescence and, 884
  relation to serum nutritional indicators in elderly population, 478
Diet assessment
  nutrient-calculation software, evaluation of nutrient database, 7
  reproducibility and validity of methods, 182S
Diethylstilbestrol, renal tumors and, ascorbic acid in (hamster), 1256S
Dieting, cyclical, energy expenditure and, 41
Diet record
  dietary intake and biochemical indices of nutritional status in elderly, 478
  energy intake derived from, relation to objective determinations of intake that maintains weight, 291
Digestion
  bovine milk proteins, in short bowel, 534
  lactose, strain of lactic acid bacteria in fermented milks and, 1041
1,25-Dihydroxycholecalciferol, vascular actions, 220S
Docosahexaenoic acid. *See also* Fatty acids, n-3 polyunsaturated
  erythrocyte membrane, fish/fish oil diet and, 668
  in health and disease, 438
Dopamine β-hydroxylase, ascorbic acid and, 1163S
Doubly labeled water method
  components of energy balance in well-nourished lactating women, 788
  energy requirements of young adult male, 499

Education, medical nutrition education, 618
  residency training, 957
Eggs, n-3 PUFA-enriched, blood pressure and plasma and lipoprotein lipid concentrations, 689
Eicosanoids, biosynthesis, dietary n-3 fatty acids and, 111
Eicosapentaenoic acid. *See also* Fatty acids, n-3 polyunsaturated
  erythrocyte membrane, fish/fish oil diet and, 668
  in health and disease, 438
Electron transfer, transmembrane, cytochrome b561 and ascorbic acid and, 1173S
Endothelium-derived relaxing factor, n-3 polyunsaturated fatty acids and, 438
Energy deficit, chronic alcohol consumption and, 976
Energy expenditure
  body composition and, 963
  diet composition and, 10
  exercise and, in cyclical dieting females, 41
  lactation and, 526
  in mechanically ventilated neonates, computerized indirect calorimetry, 30

reported energy intake and, in people predisposed to obesity, 506
resting
in burned children, 35
in chronic obstructive pulmonary disease, 983
in cyclical dieting females, 41
dietary potassium and, 628
in HIV infection, asymptomatic, 311
total, in lactation, 788
Energy intake
derived from diet records, relation to objective determinations of intake that maintains weight, 291
intraindividual variation, 464
in lactation, 788
reported by people predisposed to obesity, validity of, 506
urine osmolality and, 774
weight loss and, 821
Energy metabolism
cartilage cells, ascorbic acid and, 1209S
in HIV infection, asymptomatic, 311
in young adult males, 499
Energy requirements
in burned children, 35
lactation and, 526
Epidemiologic studies, ascorbic acid and cancer, 1310S
Erythorbic acid, dietary, plasma vitamin C analysis and, 1319S
Erythrocyte(s)
fatty acid composition, fish/fish oil diet and, 668
Na^+, K^+-ATPase activity, in nutritional dwarfing, 997
Estradiol, renal tumors and, ascorbic acid in (hamster), 1256S
Estrogen(s)
renal tumors and, ascorbic acid in (hamster), 1256S
serum levels, dietary fiber and, 520
Ethanol. *See* Alcohol
Ethical issues, responsible scientific conduct, 1
Exercise
body composition and resting metabolic rate and, 56
energy expenditure and, in cyclical dieting females, 41
performance, preexercise carbohydrate feeding and, 866
Eye, ascorbic acid in, 1198S

Fat
dietary
colonic hyperproliferation and (rodent), 209S
energy utilization from, chronic alcohol consumption and, 976
weight loss and, 821
taste preference for, in obesity, environmental and familial factors, 635
Fat-free mass, energy expenditure and, 963
Fat mass, energy expenditure and, 963
Fatty acids
dietary
platelet function, thromboxane production, and phospholipid fatty acid composition and, 351
relation to fatty acid composition of subcutaneous adipose tissue, 340
essential. *See also* Fatty acids, n-3 polyunsaturated
deficiency, in premature infants, intravenous lipids for, 1024
in human colostrum triglycerides, adipose tissue composition vs, 829
of plasma phospholipids, in cystic fibrosis infants, 1029
status of preterm infants, early formula feeding vs fat-free parenteral nutrition and, 93
n-3:n-6 ratio, eicosanoid biosynthesis from arachidonic acid and, 111
n-3 polyunsaturated
cardiovascular risk factors and, 118
in dietary fiber studies, 615
eggs enriched in, blood pressure and plasma and lipoprotein lipid concentrations, 689
eicosanoid biosynthesis from arachidonic acid and, 111
in health, disease, growth and development, 438
malondialdehyde and (*letter*), 429
platelet function. hemostasis, and thromboxane production and, 326
suppression of blastogenesis in mitogen-stimulated T cells, 896
vitamin E plus, effects on carbohydrate and lipid metabolism, 684
n-6 polyunsaturated, in health and disease, 438
phospholipid, essential fatty acid status in preterm neonates and, 93
in platelet phospholipids, diet and, 351
polyunsaturated, dietary, serum cholesterol and apolipoprotein concentrations and, 104
saturated, platelet aggregation and, 359
subcutaneous adipose tissue distribution, diet and, 340
trans, availability in US diet, 363
Feces
calcium loss
calcium requirements and, 261S
relation to skeletal calcium loss, 266S
mutagens, elimination of, dietary ascorbic acid and, 1302S
Fermentation, colonic, serum lipids and, 141
Ferritin
degradation, ascorbic acid and, 1188S
plasma, biological variation, 729
serum, in identifying nonanemic iron deficiency, 1071
Fiber, dietary
colonic fermentation, LDL cholesterol and, 141
glycemic response and, 414
lipid responses to, in hypercholesterolemic men, 678
low-phytate barley fiber, effect on calcium, magnesium, zinc and iron balances, 553
metabolic effects, in insulin-dependent diabetes, 936
physical/hormonal sexual maturation in pubertal girls and, 805
serum estrogens and, 520
soluble, in wheat-based bakery products, hypocholesterolemic effects, 836
study-design dilemmas, 615
Fibroblast(s), human skin, ascorbic acid transport and accumulation in, 1144S
Fish diet
apolipoprotein B levels and, in normotriglyceridemic subjects, 334
erythrocyte membrane fatty acid composition and, 668
LDL cholesterol levels and, in normotriglyceridemic subjects, 334
platelet function, hemostasis, and thromboxane production and, 326
Fish oil. *See also* Fatty acids, n-3 polyunsaturated
dietary
cardiovascular risk factors and (*letter*), 610
eicosanoid biosynthesis from arachidonic acid and, 111
erythrocyte membrane fatty acid composition and, 668
in sickle cell disease, 736
tumor growth and (*letter*), 606
vitamin E plus, effects on carbohydrate and lipid metabolism, 684
Fluoxetine, weight loss in obesity and, 321
Food, vitamin C content, sample variability, 1323S
Food and Drug Administration, aluminum content of parenteral solutions (*letter*), 951
Food intake
aging and, 988
behavior, intraindividual variation, 464
Food preferences, of children, genetic sensitivity to bitter taste of 6-*n*-propylthiouracil and, 316
Food selection, sensory-specific satiety in, aging and, 988
Food service fats and oils, *trans* fatty acids in, 363
Formula feeding, in preterm infants, effect on essential fatty acid status, 93
Fourth Conference for Federally Supported Human Nutrition Research Units and Centers, 164
Fracture(s), osteoporotic
caffeine and alcohol intake and, 157
calcium intake and, 242S

Gastrointestinal tract, cancer prevention, biomarkers in, 188S
Genetics
children's food preferences and genetic sensitivity to bitter taste of 6-*n*-propylthiouracil, 316
gulonolactone oxidase deficiency, 1203S
Geriatric population
dietary intake and biochemical indices of nutritional status, 478
glucose intolerance in, carbohydrate intake and body mass index and, 136
lymphocyte subpopulations in, β-carotene and (*letter*), 432

vitamin A supplementation, plasma retinol, retinyl esters, and liver enzyme activities and, 878
Glucagon, plasma, fish oil +/- vitamin E and, 684
Glucose
ascorbic acid transport in neutrophils and, 1221S
in human milk, 69
plasma, fish oil +/- vitamin E and, 684
protein metabolism kinetics and, in infants undergoing parenteral feeding, 370
Glucose intolerance, in elderly, carbohydrate intake and body mass index and, 136
Glucose tolerance test, impaired
chromium supplementation and, 909
in elderly, carbohydrate intake and body mass index and, 136
Glycemic index
carbohydrates, comparative continuous-indirect-calorimetry study, 855
dietary fiber content of foods and, 414
methodology and clinical implications, 846
Glycemic response
dietary fiber content of foods and, 414
high-amylose rice and, variations in, 871
methodology and clinical implications, 846
Growth and development
calcium metabolism and requirements during, 245S
in cystic fibrosis infants, nutritional status and, 578
infants of smoking mothers, 1011
moderate blood lead levels and, in Mexican-American children, 516
n-3 polyunsaturated fatty acids in, 438
short-term supplementary feeding in nutritionally at-risk Indonesian infants, 799
in stunted children, nutritional supplementation and psychosocial stimulation and, 642
vitamin A supplementation and, 568
Growth hormone, plasma, fish oil +/- vitamin E and, 684
Growth retardation, nutritional dwarfing, 997
Gulonolactone oxidase, deficiency, molecular basis, 1203S

Height
knee-height measurement in bed-bound nursing home residents (*letter*), 611
low for age. *See* Stunting
Hematocrit, biological variation, 729
Hematopoietic stem cells, L-ascorbic acid and, 1241S
Hemoglobin, biological variation, 729
Hemostasis, dietary fish and, 326
HIV infection
ascorbic acid in, 1231S
asymptomatic, resting energy expenditure and substrate oxidation in, 311
Homocysteine, remethylation and transsulfuration, betaine supplementation and, 386
Human immunodeficiency virus (HIV). *See* HIV infection
Hydrogen breath test
effectiveness of lactose-reduced milks in milk intolerance, 148
milk-induced malabsorption in malnourished African patients, 130
25-Hydroxycholecalciferol
intestinal absorption, in Crohn's disease and intestinal resection, 548
serum, colorectal cancer and, 193S
Hydroxycobalamin, ascorbic acid plus, in Ehrlich carcinoma and L1210 leukemia (mouse), 1261S
3-Hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase inhibitor, pravastatin, 696
Hydroxyproline, biosynthesis, ascorbic acid and, 1228S
Hyperglycemia, chromium supplementation and, 909
Hyperlipidemia, wheat-based bakery products and, 836
Hypersensitivity, delayed, cutaneous, very-low-energy all-protein diet and, 123
Hypertension
calcium-regulating hormones in, 220S
dietary calcium and, 215S
n-3 polyunsaturated fatty acids in, 438
pregnancy-induced, calcium supplementation and, 237S
sodium chloride-sensitive, dietary calcium in (rat), 227S
Hypoalbuminemia, tryptophan and tube feeding and (*letter*), 765
Hypolactasia, in African patients, milk tolerance in, 130
Hypothalamus, in NaCl-sensitive hypertension, dietary calcium and (rat), 227S

Immune function
β-carotene and (*letter*), 609
vitamin C deficiency and, 1302S
Immunity, protein quality and, 123
Immunocompetence, oxidative defense and, in vitamin C deficiency, 1302S
Immunotherapy, hypovitaminosis C and, 1292S
Industrial fats and oils, *trans* fatty acids in, 363
Infant(s)
calcium metabolism and requirements, 245S
cystic fibrosis
essential fatty acid status and fluidity of plasma phospholipids in, 1029
nutritional status and, 578
growth rate, maternal smoking and, 1011
low-birth-weight
body composition, 296
TPN for, calcium glycerophosphate vs conventional mineral salts in, 903
newborn
behavior, determinants of, 657
cysteine-supplemented TPN in, acidosis and, 565
mechanically ventilated, computerized indirect calorimetry in, 30
parenteral nutrition, protein metabolism kinetics and energy-substrate utilization, 370
premature, essential fatty acid deficiency in, intravenous lipids for, 1024
preterm
body mineral composition, calcium and phosphorus deficiencies and (piglet), 420
essential fatty acid status, early formula feeding vs fat-free parenteral nutrition, 93
Infant feeding
essential fatty acid status of preterm infants, early formula feeding vs fat-free parenteral nutrition, 93
practices in Pakistan, risk of acute/persistent diarrhea and, 745
short-term supplementary feeding in nutritionally at-risk Indonesian infants, 799
Inflammation, n-3 polyunsaturated fatty acids in, 438
In situ kinetics, ascorbic acid regulation of norepinephrine synthesis, 1157S
Insulin, plasma, fish oil +/- vitamin E and, 684
Insulin-like growth factors, collagen synthesis in scurvy and, 1135S
Interleukin-2, immunotherapy, hypovitaminosis C and, 1292S
Intestine
absorption. *See* Absorption
resection. *See* Short bowel; Short bowel syndrome
Intestine, small, methotrexate-induced mucosal injury, dietary menhaden oil in (rat), 346
Iodine, deficiency, selenium deficiency and (*letter*), 606
Iron
absorption
calcium supplementation and (*letter*), 607
low-phytate barley fiber concentrate and, 553
manganese and zinc and, 152
ascorbic acid prooxidant activity and, 1125S
balance
low-phytate barley fiber and, 553
nonheme iron bioavailability and, 717
metabolism
ascorbic acid and, 1188S
vitamin B-6 deficiency and, 1059
nonheme
absorption, species differences, 723
bioavailability, 717
plasma, biological variation, 729
requirements, in menstruating females, 1047
status
biological variation, 729
of inner-city schoolchildren, 1071
serum transferrin receptor in pregnancy, 1077

Iron deficiency
lymphocyte proliferation in, impaired protein kinase C activation and (mouse), 944
screening methods, 1071
Isoflavonoids, urinary excretion of, traditional Japanese diet and, 1093
Isoleucine, dietary intake, leucine metabolism and, 402
Isotope studies
betaine supplementation and methionine kinetics in adult males, 386
methionine kinetics and balance at FAO/WHO/UNU intake requirement in adult males, 377
postprandial changes in nonprotein nitrogen in human milk, 1017
proline metabolism in adult male burn patients, 408
selenomethionine metabolism, 917
vitamin B-6 deficiency and zinc, copper, and iron metabolism, 1059

K562 cells, lysosomal autophagy of ferritin, ascorbic acid and, 1188S
Kidney, tumors, estrogen-induced, ascorbic acid in (hamster), 1256S

Lactation
dietary carnitine effects on carnitine in urine and milk, 814
energy balance in, 788
energy requirements during, 526
milk composition and secretion
time-dependent changes through first 6 months, 69
during weaning and lactogenesis, 81
smoking during, breast-milk volume and, 1011
Lactobacillus acidophilus, effect on in vivo lactose digestion, 1041
Lactobacillus delbrueckii subsp *bulgaricus*, effect on in vivo lactose digestion, 1041
Lactogenesis, milk volume and nutrient composition during, 81
Lactose
in human milk, 69
maldigestion, strain of lactic acid bacteria in fermented milks and, 1041
Lactose intolerance
effectiveness of lactose-reduced milks in, 148
in malnourished African patients, milk in, 130
strain of lactic acid bacteria in fermented milks and, 1041
Lactulose, colonic fermentation, LDL cholesterol and, 141
Lead, blood concentration, relation to stature, 516
Lean tissue density, obesity and non-insulin-dependent diabetes and, 509
Lens of eye, proteins, ascorbic acid and, 1198S
Letters, 169, 429, 606, 760, 951
Leucine
dietary intake, valine metabolism and, 395
metabolism, valine and isoleucine intakes and, 402
requirements, 402
Leukemia, L-ascorbic acid in, 1241S
Leukocyte(s), peripheral blood, very-low-energy all-protein diet and, 123
Leukotriene(s), leukotriene B_4 synthesis in small intestine mucosal injury, dietary menhaden oil and (rat), 346
Lignans, urinary excretion of, traditional Japanese diet and, 1093
Linoleic acid
dietary, platelet aggregation and, 359
intravenous infusion, in premature infants, essential fatty acid deficiency and, 1024
serum levels, in cystic fibrosis infants, 578
Linolenic acid, dietary, eicosanoid biosynthesis from arachidonic acid and, 111
α-Linolenic acid
in health and disease, 438
platelet function, thromboxane production, and phospholipid fatty acid composition and, 351
Lipid(s)
chromium supplementation and, 909
in C3H/10T1/2 cells, ascorbic acid and, 1236S
intravenous emulsions, platelet response to (*letter*), 431
metabolism
in non-insulin-dependent diabetes, low-fat, high-carbohydrate diet vs high monounsaturated fatty acid diet and, 586
propionate and, 860
peroxidation
ascorbic acid and, 1113S, 1119S
ascorbic acid-induced, collagen gene expression and, 1141S
plasma
n-3 fatty acids and, 118
oat bran and, 841
protein metabolism kinetics and, in infants undergoing parenteral feeding, 370
serum
colonic fermentation and, 141
effects of dietary fats high in stearic acid, 1036
meat consumption and, 930
Lipoprotein(s)
low-density (LDL)
effects of dietary fats high in stearic acid, 1036
oxidative damage, ascorbic acid and, 1113S
oxidative modification, oleate-rich diet and, 701
plasma
coffee and, 599
oat bran and, 841
in pediatric familial hypercholesterolemia, effect of soy protein on, 98
serum, β-carotene and (*letter*), 609
Lipoprotein lipase, plasma levels, coffee and, 599
Liver, fatty, of malnutrition, peroxisomes in, 674
Liver function tests, in helathy elderly population, vitamin A supplementation and, 878
Lymphocyte(s)
proliferation, in iron deficiency, impaired proteinkinase C activation and (mouse), 944
subpopulations, in elderly, β-carotene and (*letter*), 432
transformation, fish oil and vitamin E and, 896
Lymphokine-activated killer cells, immunotherapy, hypovitaminosis C and, 1292S
Lysosomes, autophagy of ferritin, ascorbic acid and, 1188S

Magnesium, balance, low-phytate barley fiber and, 553
Magnetic resonance imaging (MRI)
fat distribution in obesity and diabetes, 623
quantitation and distribution of body adipose tissue, 18
Malabsorption
lactose, effectiveness of lactose-reduced milks in, 148
milk-induced, in malnourished African patients, 130
vitamin D, in Crohn's disease and intestinal resection, 548
Malnutrition
intracellular potassium and membrane potential in muscle (rat), 489
milk-induced malabsorption in African patients, 130
protein-calorie, supplementary feeding and recovery from wasting in, 62
protein-energy, fatty liver in, peroxisomes and, 674
Malondialdehyde, n-3 polyunsaturated fatty acids and (*letter*), 429
Mammary cells, tight junctions, milk composition and, 69
Mammary gland
cancer, dietary calcium and (rat), 206S
tumors
human mammary tumor xenograft growth, ascorbic acid and (mouse), 1274S
spontaneous, ascorbic acid and (mouse), 1252S
Manganese
absorption, dietary components and, 1065
iron absorption and, 152
Meal frequency, thermic effect of food and, 783
Meal size, thermic effect of food and, 783
Measles, morbidity in African children, vitamin A supplementation and, 890
Meat consumption, association with other diet and health factors in young adults, 930
Melanoma, experimental transplanted, ascorbic acid therapy (mouse), 1284S
Membrane potential, muscle, during malnutrition/refeeding (rat), 489
Menarche, age at, nutrient intake and, 649, 805
Menhaden oil, dietary
effect on normal growth and development and on mucosal injury (rat), 346
eicosanoid biosynthesis from arachidonic acid and, 111

Menstruation, iron requirements and, 1047
Mental development, short-term supplementary feeding in nutritionally at-risk Indonesian infants and, 799
Metabolic rate
  basal
    in lactation, 788
    in young adult males, 499
  resting
    accuracy of FAO/WHO/UNU predictive equations (*letter*), 613
    dietary potassium and, 628
    very-low-calorie diet and physical training regimens and, 56
Metastasis, melanoma, ascorbic acid treatment and (mouse), 1284S
Methane breath test, milk-induced malabsorption in malnourished African patients, 130
Methionine
  kinetics and balance, at FAO/WHO/UNU intake requirement in adult males, 377
  transmethylation, betaine supplementation and, 386
Microsomal ethanol oxidizing system, chronic alcohol consumption and energy deficit, 976
Milk
  human. *See also* Breast-feeding; Lactation
    calcium supplementation, manganese absorption and, 1065
    carnitine concentration, dietary carnitine and, 814
    composition
      time-dependent changes through first 6 months, 69
      during weaning and lactogenesis, 81
    nonprotein nitrogen in, postprandial changes, 1017
    output, in well-nourished lactating women, 788
    pteroylglutamates in (*letter*), 760
    secretion
      time-dependent changes through first 6 months, 69
      during weaning and lactogenesis, 81
    volume
      smoking and, 1011
      during weaning and lactogenesis, 81
  intolerance, lactose-reduced milks in, 148
  lactose-reduced, in lactose malabsorption, 148
  tolerance to, in malnourished African patients, 130
Milk proteins, bovine, digestion, in short bowel, 534
Mineral(s)
  deficiency, body mineral composition and (piglet), 420
  in human milk, 69
  supplements, potency of, 750
Mitogen response, very-low-energy all-protein diet and, 123
Molecular biology, gulonolactone oxidase deficiency, 1203S
Motor development, short-term supplementary feeding in nutritionally at-risk Indonesian infants and, 799
Mucosa, small intestine, growth and development, dietary menhaden oil and (rat), 346
Muscle. *See* Skeletal muscle; Smooth muscle
Mutagens, fecal, elimination of, dietary ascorbic acid and, 1302S
Myelodysplastic syndromes, L-ascorbic acid in, 1241S

NaCl. *See* Sodium chloride
NADH, in C3H/10T1/2 cells, ascorbic acid and, 1236S
Neuroendocrine peptides, biosynthesis, ascorbic acid and, 1153S
Neurotransmitters, synthesis, ascorbic acid and, 1163S
Neutrophil(s)
  activation, oxidative damage and, ascorbic acid in, 1113S
  ascorbic acid in, 1221S
  bactericidal activity, ascorbic acid and (animals), 1214S
Nitrogen, nonprotein, in human milk, postprandial changes, 1017
Nitrogen balance
  in measuring changes in lean body mass during weight reduction, 970
  TPN and, in bone-marrow transplant recipient, 1087
Nomograms, for determining body mass index, error in, 435
Norepinephrine
  synthesis, ascorbic acid and, 1157S
  turnover in hypothalamus, sodium chloride-induced, dietary calcium and (rat), 227S
Normotriglyceridemia, dietary fish and serum LDL cholesterol and apolipoprotein B, 334
Nucleotide sequence, gulonolactone oxidase, 1203S
Nutrient(s), interactions and toxicities, 164
Nutrient balance, diet composition and, 10
Nutrition. *See also* Diet
  adequacy of, in patients taking pravastatin, 696
  age at menarche and, 649
  function and, 164
  infant. *See* Breast-feeding; Infant feeding
  parenteral. *See* Parenteral nutrition
  physical/hormonal sexual maturation in pubertal girls and, 805
Nutritional assessment, relation between energy intake derived from diet records and objective determinations of intake that maintains weight, 291
Nutritional dwarfing, erythrocyte Na^+, K^+-ATPase activity in, 997
Nutritional status
  daily physical activity of handicapped students and, 1101
  elderly population, biochemical indicators, dietary intake and, 478
Nutritional supplementation. *See also specific nutrients*
  characteristics of vitamin and mineral supplement products in US, 750
  growth of stunted children and, 642
  recovery from wasting in preschool children and, 62
  short-term supplementary feeding in nutritionally at-risk Indonesian infants, 799

Oat bran
  hypocholesterolemic effects, 841
  lipid responses to, in hypercholesterolemic men, 678
Obesity
  age at menarche and, 649
  alcohol intake and, 49
  body fat distribution in, magnetic resonance imaging, 623
  effect on skeletal muscle mass, 509
  estimation of deep abdominal adipose tissue accumulation, 471
  glucose intolerance in elderly and, 136
  low-fat diet in, 821
  reference data
    letter, 953
    85th and 95th percentiles of body mass index, 773
  taste preferences in, environmental and familial factors, 635
  validity of self-reported energy intake in people predisposed to, 506
  very-low-calorie diet in, changes in lean body mass during, 970
  very-low-energy diet in, effects on circulating leukocytes and mitogen responses, 123
  weight loss in, fluoxetine and, 321
2-*O*-Octadecylascorbic acid, adriamycin toxicity and (animals), 1298S
Oleic acid, dietary, platelet aggregation and, 359
Olfactory function, age and, effects on food intake/selection, 988
Oral cavity, flora, ascorbic acid and (animals), 1214S
Oropharyngeal cancer, cholestyramine and (*letter*), 429
Osteoporosis, 425
  bone mass and, 245S
  calcium supplementation and bone loss, 274S
  diet and, assessment methods in, 182S
  evolutionary perspective, 281S
  fractures in
    caffeine and alcohol intake and, 157
    calcium intake and, 242S
Oxidation
  carbohydrate, exercise performance and, 866
  leucine, valine intake and, 402
  metal-catalyzed, ascorbic acid and, 1125S
  methionine
    betaine supplementation and, 386
    at FAO/WHO/UNU intake requirements in adult males, 377
  mixed-function systems, 1125S
  proteins, ascorbic acid and, 1125S
  valine, leucine intake and, 395
Oxidative damage, vitamin C deficiency and, 1302S
Oxygen consumption, in mechanically ventilated neonates, computerized indirect calorimetry, 30
Oxygen free radicals
  ascorbic acid as scavenger of, 1119S
  ascorbic acid-promoted generation of, 1125S
  vitamin C deficiency and, 1302S

Parathyroid hormone, vascular actions, 220S
Parathyroid hypertensive factor, vascular actions, 220S
Parenteral nutrition
  aluminum content of solutions (*letter*), 612, 951
  home, oral intake plus, substrate utilization in, 560
  in infants, protein metabolism kinetics and energy-substrate utilization, 370
  total (TPN)
    in bone-marrow transplant recipient, 1087
    in neonates, cysteine supplementation and acidosis, 565
    in premature infant, calcium glycerophosphate vs conventional mineral salts in, 903
  tryptophan content of Isocal (*letter*), 763
  tryptophan content of TwoCal HN (*letter*), 767
Pediatric patient
  burns in, energy requirements and, 35
  calcium absorption efficiency and requirements, 261S
  calcium metabolism and requirements, 245S
  familial hypercholesterolemia, effect of soy protein on plasma lipoproteins in, 98
  food preferences and genetic sensitivity to bitter taste of 6-*n*-propylthiouracil, 316
  measles morbidity in African children, vitamin A supplementation and, 890
  obesity, taste preferences in, environmental and familial factors, 635
  plasma response to β-carotene, 539
  stature and moderate blood lead levels, 516
  stunting, nutritional supplementation and psychosocial stimulation in, 642
  supplementary feeding and recovery from wasting in preschool children, 62
  vitamin A status, serum vitamin A distribution curve and, 707
  vitamin A supplementation, effects on diarrhea, respiratory infections and growth in children, 568
Peptidylglycine α-amidating monooxygenase, ascorbic acid and, 1153S, 1163S
Peroxisomes, fatty liver of malnutrition and, 674
pH, of human milk, 69
Pharmacokinetics, selenomethionine metabolism, 917
Phosphate
  dietary
    colonic hyperproliferation and (rodent), 209S
    mammary gland cancer and (rat), 206S
  inorganic, in human milk, 69
Phospholipids
  fatty acids in, essential fatty acid status in preterm neonates and, 93
  membrane fluidity, in cystic fibrosis, 1029
  plasma, essential fatty acid status and fluidity, in cystic fibrosis infants, 1029
Phosphorus
  deficiency, body mineral composition and (piglet), 420
  retention, in premature infants on TPN, calcium glycerophosphate vs conventional mineral salts for, 903
Physical activity
  daily, of handicapped students, nutritional status and, 1101
  meat consumption and, 930
Phytate, colorectal cancer and (*letter*), 762
Plasminogen-activator inhibitor, activity of, n-3 fatty acids and, 118
Platelet(s)
  aggregation
    dietary fatty acids and, 351
    dietary fish and, 326
    n-3 fatty acids and, 118
    replacement of dietary linoleic acid with oleic acid and, 359
  fatty acid profile, dietary fish and, 326
  function, dietary fish and, 326
  phospholipid fatty acids, diet and, 351
  response to intravenous lipid emulsions (*letter*), 431
Platelet-derived growth factor, n-3 polyunsaturated fatty acids and, 438
Polyenoics, long-chain, plasma, essential fatty acid status in preterm neonate and, 93
Population studies, alcohol intake in relation to diet and obesity, 49
Potassium
  dietary
    energy expenditure and, 628
    urine osmolality and, 774
  in human milk, 69
  intracellular, in muscle, during malnutrition/refeeding (rat), 489
  serum, TPN and, in bone-marrow transplant recipient, 1087
Pravastatin, diet and, 696
Pregnancy
  hypertension in, calcium supplementation and, 237S
  outcome, newborn behavior and, determinants of, 657
  smoking during, breast-milk volume and, 1011
Prematurity, incidence, calcium supplementation during pregnancy and, 237S
Proline, metabolism, in adult male burn patients, 408
Propionate, lipid and carbohydrate metabolism and, 860
6-*n*-Propylthiouracil, genetic sensitivity to bitter taste of, children's food preferences and, 316
Prostaglandin(s)
  n-3 polyunsaturated fatty acids and, 438
  PGE_2 synthesis in small intestine mucosal injury, dietary menhaden oil and (rat), 346
Protein(s)
  dietary intake, urine osmolality and, 774
  lens of eye, ascorbic acid and, 1198S
  metabolism, in infants undergoing parenteral feeding, effect of glucose and fat on, 370
  milk, bovine, digestion in short bowel, 534
  oxidation, ascorbic acid and, 1125S
  quality, immune function and, 123
  turnover, experimental diet and bed rest and (*letter*), 607
Protein kinase C, activation, iron deficiency and (mouse), 944
Proteoglycans, synthesis, in scurvy, insulin-like growth factors and, 1135S
Proton-electron transfer, ascorbic acid and cytochrome b561, 1179S
Pseudogene, gulonolactone oxidase, 1203S
Psoriasis, n-3 polyunsaturated fatty acids in, 438
Psychosocial stimulation, growth of stunted children and, 642
Pteroylglutamates, in human milk (*letter*), 760
Puberty, dietary habits, sexual maturation. and plasma hormones in girls, 805
Pulmonary disease, chronic obstructive (COPD), resting energy expenditure in, 983

Questionnaire(s), fatty acid intake, relation to fatty acid composition of subcutaneous adipose tissue, 340

Radiation therapy, effects on bone marrow, skin, and tumor, ascorbic acid and (mouse), 1281S
Radioiron absorption study
  nonheme iron absorption, species difference, 723
  nonheme iron bioavailability, 717
Refeeding, intracellular potassium and membrane potential in muscle (rat), 489
Research
  calcium, 288S
  nutrition research in clinical setting, 179S
  report on Fourth Conference for Federally Supported Human Nutrition Research Units and Centers, 164
Respiratory distress syndrome, intravenous lipid infusions and, in premature infant, 1024
Respiratory infection, vitamin A supplementation and, in children in southern India, 568
Retinol
  plasma
    in adolescence, 884
    in healthy elderly population, vitamin A supplementation and, 878
  plasma response to β-carotene, in Guatemalan schoolchildren, 539
Retinol-binding protein, plasma, in adolescence, 884
Retinyl esters, plasma, in healthy elderly population, vitamin A supplementation and, 878
Rheumatoid arthritis, plasma zinc and copper concentrations in, diet and, 1082
Rice, high-amylose, variations in starch digestibility and glycemic response, 871

Rous sarcoma virus, replication and oncogenic transformation of cell culture, ascorbate and, 1247S

Safflower oil, dietary
  effects on normal growth and development in small intestine mucosa (rat), 346
  effects on serum lipids and apolipoproteins in healthy men, 104
  platelet function, thromboxane production, and phospholipid fatty acid composition and, 351
Salt. *See* Sodium chloride
Saponins, in dietary fiber studies, 615
Satiety
  sensory-specific, aging and, 988
Scurvy, collagen synthesis in, insulin-like growth factors and, 1135S
Selenium
  deficiency, iodine deficiency and (*letter*), 606
  pharmacokinetics, 917
Sex hormones
  plasma, in pubertal girls, diet and, 805
  urinary, in premenopausal vegetarian and nonvegetarian females, 1005
Sexual maturation, in pubertal girls, diet and, 805
Short bowel, digestion of milk proteins in, 534
Short bowel syndrome, cholecalciferol and 25-hydroxycholecalciferol absorption in, 548
Sickle cell disease, nutritional supplementation in, 736
Skeletal muscle
  acetylcholine receptor regulation in vitro, ascorbic acid-induced collagen secretion and (rat), 1184S
  in malnutrition/refeeding, intracellular potassium and membrane potential in (rat), 489
  mass, obesity and non-insulin-dependent diabetes and, 509
Skin
  calcium loss, relation to skeletal calcium loss, 266S
  radiation effects, ascorbic acid and (mouse), 1281S
Skinfold thickness, estimation of deep abdominal adipose tissue accumulation, 471
Skin tumors
  phorbol ester-induced, ascorbic acid and ascorbyl palmitate effects in (mouse), 1266S
  UV-light-induced, ascorbic acid and (mouse), 1252S
Smooth muscle, vascular, actions of calcium-regulating hormones in hypertension, 220S
Sodium
  dietary intake, urine osmolality and, 774
  in human milk, 69
  serum, TPN and, in bone-marrow transplant recipient, 1087
Sodium chloride, hypertension and, dietary calcium in (rat), 227S
Somatomedin C, plasma, fish oil +/- vitamin E and, 684
Soybean oil, in sickle cell disease, 736
Soy protein, effect on plasma lipoproteins, in pediatric familial hypercholesterolemia, 98
Spine. *See* Vertebra(ae)
Starch
  digestibility, of high-amylose rice, variations in, 871
  resistant, in dietary fiber studies, 615
Stature
  knee-height measurement in bed-bound nursing home residents (*letter*), 611
  moderate blood lead levels and, in Mexican-American children, 516
Stearic acid, in dietary fats, effects on serum lipids and lipoproteins, 1036
Steatorrhea, vitamin D absorption in Crohn's disease and intestinal resection and, 548
Sterols, plant, 615
Strength, in obese females, very-low-calorie diet and physical training regimens and, 56
Streptococcus salivarius subsp *thermophilus*, effect on in vivo lactose digestion, 1041
Study design
  dilemmas in dietary fiber studies, 615
  persistent changes in erythrocyte membrane fatty acid composition after n-3 PUFA intake, 668
Stunting, nutritional supplementation and psychosocial stimulation in, 642
Subrenal capsule assay, ascorbic acid and human mammary tumor xenograft growth (mouse), 1274S
Substrate oxidation
  diet composition and, 10
  in HIV infection, asymptomatic, 311
  oral supplementation in home parenteral nutrition and, 560
Sucrose, dietary intake, alcohol intake and, 49
Sugar, taste preference for, in obesity, environmental and familial factors, 635
Superoxide dismutase, copper-zinc, ascorbic acid and, 1193S
Sweat, calcium loss, calcium requirements and, 261S

T cells, mitogen-stimulated, fish-oil-induced suppression of blastogenesis in, vitamin E and, 896
Tanner Sexual Maturity Rating, variation in vertebral bone mineral density in adolescent females and, 425
Taste sensitivity
  age and, effects on food intake/selection, 988
  bitter taste, genetic sensitivity to, food preferences of children and, 316
Thermic effect of food, effects of meal size and frequency, 783
Thromboxane, platelet production
  dietary fatty acids and, 351
  dietary fish and, 326
Tight junctions, mammary cells, milk composition and, 69
α-Tocopherol. *See also* Vitamin E
  use of term without clarification (*letter*), 760
Tocotrienols, in high-fiber plant foods, 615
Transferrin receptor, serum, in iron deficiency detection in pregnancy, 1077
Triacylglycerol, plasma, fish oil +/- vitamin E and, 684
Triglycerides
  plasma levels
    low-fat, high-carbohydrate diet vs high monounsaturated fatty acid diet and, in non-insulin-dependent diabetes, 586
    n-3 PUFA-enriched eggs and, 689
    plasma retinol, β-carotene, and α-tocopherol during adolescence and, 884
  se[illegible], wheat-based bakery products and, 836
ϵ-*N*-Trimethyllysine hydroxylase, ascorbic acid and, 1147S
Tryptophan
  content in Isocal (*letter*), 763
  content in TwoCal HN (*letter*), 767
  tube feeding and hypoalbuminemia (*letter*), 765
Tube feeding
  Isocal preparation, tryptophan content (*letter*), 763
  tryptophan and hypoalbuminemia (*letter*), 765
  tryptophan content of TwoCal HN (*letter*), 767
Tumor(s)
  growth, fish oil feeding and (*letter*), 606
  malignant. *See* Cancer; *specific organs*
  mammary gland, spontaneous, ascorbic acid and (mouse), 1252S
  radiation therapy, ascorbic acid and (mouse), 1281S
  renal, estrogen-induced, ascorbic acid in (hamster), 1256S
  skin. *See* Skin tumors

Ulcerative colitis, n-3 polyunsaturated fatty acids in, 438
Urate, serum, as antioxidant for ascorbic acid, 1129S
Urea nitrogen, in human milk, postprandial changes, 1017
Urine
  calcium loss
    calcium requirements and, 261S
    relation to skeletal calcium loss, 266S
  carnitine concentration, in lactating females, dietary carnitine and, 814
  osmolality, dietary nutrient intake and, 774
  sex hormone concentrations, in premenopausal vegetarian and nonvegetarian females, 1005

Valine
  dietary intake, leucine metabolism and, 402
  metabolism, leucine intake and, 395
  requirements, 395
Vegetarianism
  association with other diet and health factors in young adults, 930
  urinary hormonal concentration and spinal bone densities of premenopausal females, 1005

Vertebra(ae), bone mineral density
calcium intake and
in adolescent females, 425
in healthy postmenopausal women, 927
in premenopausal vegetarian and nonvegetarian females, 1005
Vitamin(s), supplements, potency of, 750
Vitamin A. *See also* Retinol
dietary intake, plasma β-carotene and, 539
serum levels, in cystic fibrosis infants, 578
status, relative-dose-response test, serum vitamin A distribution curve and, 707
supplementation
effect on diarrhea, respiratory infections and growth, in children in southern India, 568
in geriatric population, plasma retinol, retinyl esters, and liver enzyme activities and, 878
measles morbidity in African children and, 890
Vitamin A deficiency, subclinical, serum vitamin A distribution curve and, 707
Vitamin B-12, ascorbic acid plus, in Ehrlich carcinoma and L1210 leukemia (mouse), 1261S
Vitamin B-6 deficiency, zinc, copper, and iron metabolism and, 1059
Vitamin C. *See also* Ascorbic acid
deficiency
collagen synthesis in, 1135S
immunocompetence and oxidant defense in, 1302S
in foods, sample variability, 1323S
supplementation, in sickle cell disease, 736
synergism with vitamin E, 1119S
Vitamin D
dietary
colonic hyperproliferation and (rodent), 209S
colorectal cancer morbidity and mortality and, 193S
mammary gland cancer and (rat), 206S
intestinal absorption, in Crohn's disease and intestinal resection, 548
Vitamin E
n-3 fatty acids plus, effects on carbohydrate and lipid metabolism, 684
plasma, in adolescence, 884
reversal of fish-oil-induced suppressed blastogenesis in mitogen-stimulated T cells, 896
serum levels, in cystic fibrosis infants, 578
supplementation, in sickle cell disease, 736
synergism with vitamin C, 1119S

Waist-to-hip ratio, estimation of deep abdominal adipose tissue accumulation, 471
Wasting, recovery from, supplementary feeding and, 62
Water. *See also* Body water
extracellular
low-birth-weight infants, bioelectrical reactance and, 296
multiple-frequency bioelectrical impedance analysis, 26
Weaning, milk volume and nutrient composition during, 81
Weight
fluctuations, taste preference and, 635
guidelines for Americans (*letter*), 171
Weight loss
body fat distribution and, magnetic resonance imaging, 623
fluoxetine and, 321
low-fat diet and, 304, 821
Weight reduction, changes in lean body mass during, BIA in, 970
Wheat, in bakery products, hypocholesterolemic effects, 836
Wheat bran
dietary, serum estrogens and, 520
lipid responses to, in hypercholesterolemic men, 678
Work capacity, in obese females, very-low-calorie diet and physical training regimens and, 56
Work performance, dietary supplements and (*letter*), 608

Yogurt, strain of lactic acid bacteria in, effect on in vivo lactose digestion, 1041

Zinc
balance, low-phytate barley fiber and, 553
iron absorption and, 152
metabolism, vitamin B-6 deficiency and, 1059
plasma, in rheumatoid arthritis, diet and, 1082
supplementation, in sickle cell disease, 736

Author Index
Volume 54

Abbasi AA, 764, 766, 769
Abdallah RM, 1284S
Abrams SA, 420
Adams J, 565
Adams SL, 1209S
Adlercreutz H, 1093
Albers JJ, 599
Alfrey AC, 952
Allard JP, 489
Allen JC, 69, 81
Almazan F, 701
Almeras N, 506
Alson AK, 957
Ames BN, 1302S
Anderson JW, 678, 836, 936
Anderson RA, 909
Andon MB, 927
Anliker JA, 316
Antoine J-M, 829
Antoine JM, 1041
Apfelbaum M, 118
Applewhite TH, 363
Archer P, 69
Archer PC, 81
Arnaud J, 951
Ashford J, 788
Atkinson SA, 903
Atwood HL, 489
Aye P, 304
Azcue MP, 613
Azevedo MNA, 707

Bader B, 370
Badruddin SH, 745
Baker H, 1292S
Baliga BS, 944
Ballard-Barbash R, 684, 896
Ball MJ, 841
Barden HS, 170
Bard J-M, 118
Barger-Lux MJ, 607
Barreto-Lins MC, 707
Barrett-Connor E, 182S
Barr SI, 169
Bartoshuk L, 316
Bassily NS, 657
Baxter J, 767
Beard JL, 729
Beaton GH, 464
Behnke O, 431
Bell DE, 689
Beltramello G, 586
Bengoa JM, 548
Berger C, 829
Bergsten P, 1144S, 1157S
Berlin E, 684
Berrada NM, 1041
Berry TE, 41
Betschart AA, 1059
Bhagavan HN, 684, 878, 896
Bhathena SJ, 684
Bhutta ZA, 745
Biffanti S, 586
Bishry Z, 657
Black AE, 788
Blackwood DJ, 346
Block G, 1310S
Boker JR, 957
Bolt MJG, 548
Bonanome A, 586
Borel MJ, 729
Bortz W Jr, 599
Bosello O, 860
Botsford SJ, 321
Bouchard C, 471, 628
Boudreau MC, 111
Bougnoux P, 829
Bowen PE, 304
Bowles CH, 136
Brace L, 304
Bracker M, 927
Bragg C, 930
Brand JC, 148
Bregengaard C, 431
Brenner DA, 1141S
Bresson JL, 370
Bridges KR, 1188S
Brigant L, 118
Brighenti F, 141
Broemeling L, 35
Brooks CM, 957
Brooks SEH, 674
Broughton M, 890
Brown AJ, 668
Brun D, 98
Brune M, 152
Bruning PF, 805
Bryant DG, 432
Bryden NA, 909
Buckley G, 141
Bukoski RD, 220S
Bulux J, 539
Burastero S, 26
Burini R, 377
Burke E, 130
Burke JF, 408
Burri BJ, 359
Butler JD, 1144S
Butler JDeB, 1157S
Buzzard IM, 7

Caan BJ, 930
Caesar J, 340
Callaway CW, 171
Cameron GG, 18
Canary JJ, 909
Canfield LM, 539
Carey PM, 578
Carriaga MT, 1077
Carroll KK, 206S
Carroll-Michals L, 321
Carroll SS, 41
Casey CE, 81
Castillo P, 783
Cavalcanti AA, 707
Cederblad Å, 1065
Cervantes C, 997
Champ M, 855
Chang SM, 642
Chanmugam PS, 111
Chappuis P, 951
Charbonnel B, 855
Charles P, 266S
Charlton MP, 489
Chen Y-F, 227S
Cherot EK, 611
Chesney RW, 612
Chojkier M, 1141S
Chun A, 26
Ciobanu N, 1292S
Clement L, 611
Cloarec D, 855
Colditz GA, 49, 157
Cole T, 304
Colletti PM, 623
Combs GF, 164
Compos FACS, 707
Confortin L, 586
Connelly P, 141
Connolly JM, 520
Conway J, 506
Cook JD, 717, 723, 1077
Cooperman JM, 760
Coovadia HM, 890
Corey P, 141
Coronel P, 26
Costa F, 586
Couet C, 829
Coutsoudis A, 890
Coward WA, 608, 788
Crawford CL, 1266S
Cronk CE, 953
Cunnane SC, 141
Cunningham JJ, 963
Cutler B, 1077
Cuyegkeng T, 623

Dallal GE, 773, 774, 955
Danford DE, 164
Daniels AJ, 1163S

Am J Clin Nutr 1991;54:xvi–xx. Printed in USA. © 1991 American Society for Clinical Nutrition

Darcet P, 118
Darga LL, 321
Darmaun D, 560
Dassenko SA, 717
Davidsson L, 1065
Davies HL, 788
Davies KJA, 1129S
Dawson-Hughes B, 274S
Deakins DA, 678, 936
DeBolt K, 1209S
DeLoof MJ, 610
Demers LM, 1005
Denke MA, 1036
de Prost D, 118
Dériaz O, 628
de Ridder CM, 805
Derr J, 729
Deschamps J-P, 884
de Serrano JQ, 539
Després J-P, 471
Deuster PA, 175
Devine W, 623
Dewey KG, 1017
Dhariwal KR, 712, 1157S
Diaz E, 608
Dietz WH, 773, 955
Diliberto EJ Jr, 1163S
Dillon DW, 678, 836, 936
Dobs AS, 696
Doherty JF, 674
Dolecek TA, 304
Donnelly JE, 56
Donovan SM, 1017
Dougherty RM, 359
Douglass LW, 896
Draper HH, 429
Drewnowski A, 635
Driss F, 118
Drüeke T, 215S
Dutcher JP, 1292S

Eaton SB, 281S
Eckel LA, 206S
Eipper BA, 1153S
Endert E, 311
Ereman RR, 1017
Erich WBM, 805
Eriksen EF, 266S
Evans WF, 499

Farrell PM, 578, 1024
Feldheim W, 553
Feldman EB, 618
Ferland G, 774
Ferris AM, 316
Feskens EJM, 136
Field CJ, 123
Finley B, 1077
Fleming PJ, 1173S
Floore TL, 836, 936
Flores H, 707
Foote KD, 93
Forbes E, 1209S
Foster MA, 18
Fotsis T, 1093
Fournier G, 628
Fowler PA, 18
Fraga CG, 1302S
Francom SF, 610
Frank O, 1292S
Fredrix EWHM, 983
Freeberg LE, 1319S
Frei B, 1113S
Friedman S, 997
Frigerio C, 526
Frisancho AR, 516
Fruchart J-C, 118
Fujioka K, 623
Fujita K, 1298S
Fuller MF, 18
Fumeron F, 118
Fuss P, 499

Gagné C, 98
Galal OM, 657
Garewal H, 429
Garland CF, 193S
Garland DL, 1198S
Garland FC, 193S
Garry PJ, 878
Gaylor SK, 610
Gerhard GT, 334
Gilinsky NH, 678
Giovannucci E, 49
Glasbey CA, 18
Goldberg GR, 608, 788
Goldberg ML, 606
Golden MHN, 674
Goldman M, 520
Goldschmidt MC, 1214S
Goldstein MR, 429
Goran MI, 35
Gordis E, 49
Gorham ED, 193S
Gougeon R, 123
Graham GG, 765
Grantham-McGregor SM, 642
Grasse BJ, 701
Gray-Donald K, 478
Gray DS, 623
Greenberg GR, 871
Greene HL, 10
Green P, 611
Grundy SM, 1036
Gullans SR, 774
Gutcher GR, 1024

Habicht J-P, 62
Hallberg L, 152, 1047
Hall CA, 164
Hallfrisch J, 291
Halsted CH, 1
Hämäläinen E, 1093
Hanning RM, 903
Harakeh S, 1231S
Harlander SK, 1041
Harris DA, 763
Harris ED, 1193S
Harrison GG, 539, 657
Hart SB, 111
Hartzell WO, 712
Hasegawa T, 1093
Haskell BE, 1228S
Hasling C, 266S
Heaney RP, 242S, 763
Heber D, 957
Helzlsouer K, 917
Helzlsouer KJ, 1315S
Hendricks KM, 745
Henningfield MF, 767
Henning SM, 1302S
Henry F, 767
Herbeth B, 884
Hernandez-Avila M, 157
Herndon DN, 35
Heyman MB, 499, 774
Higashi A, 1093
Higgs DJ, 1323S
Hill JO, 10
Hilner JE, 930
Himes JH, 642
Hindberg I, 431
Hochstein P, 1129S
Hoerr RA, 395, 402
Hoffer LJ, 614
Hoffman KE, 1188S
Holman RT, 1029
Holt S, 148
Hommes MJT, 311
Honjo H, 1093
Honkanen VEA, 1082
Hooks LD, 316
Horwitt MK, 760
Hoshino E, 489
Hosoya N, 1101
Houglum KP, 1141S
Hsieh C-H, 689
Hubbard VS, 164
Hudson CA, 1059
Hughes GS, 610
Hunter JE, 363
Husaini MA, 799
Husaini YK, 799
Hutner SH, 1292S
Hwang DH, 111, 351

Iacono JM, 359
Ibric LLV, 1236S
Ichikawa T, 414
Infante C, 1011
Innis SM, 93
Islam A, 745

Jacob RA, 1302S
Jacobs DR Jr, 930
Jacobsen DJ, 56
Jacobson EA, 206S
Jacques H, 98
Jakicic JM, 56
Jaksic T, 408
Jalukar V, 1179S
Janosky J, 509
Janosky JE, 970
Jariwalla RJ, 1231S
Jarnvig I-L, 431
Jaudon M-C, 951
Jeejeebhoy KN, 489
Jenkins A, 141
Jenkins AL, 846
Jenkins DJA, 141, 846, 860
Jéquier E, 526
Jerome NW, 657
Jin H, 227S
Johnson SB, 1029
Johnston CS, 1228S
Josse RG, 846
Judd JT, 291, 684, 896
Juliano BO, 871
Just B, 560

Kafatos A, 591
Kahn HS, 435
Karyadi D, 799
Karyadi L, 799
Katch FI, 175
Katch VL, 175
Keller RP, 69, 81
Kelley DE, 509
Kelley DS, 359, 1302S
Kelley PM, 1179S
Kemp T, 130
Kent UM, 1173S

Keyes WR, 1059
Khan LK, 539
Khoo JC, 701
Kim H, 623
Kim I, 750
Kimler BF, 1241S
Kim YC, 684
Kirksey A, 657
Klein GL, 952
Konishi Y, 414
Konttinen YT, 1082
Koo WWK, 612
Kouroumalis I, 591
Kramer TR, 896
Kremer D, 220S
Krempf M, 855
Kretsch MJ, 1059
Kristal AR, 821
Kromhout D, 136
Kumar SK, 608
Kunita N, 414
Kurth CL, 635
Kushi LH, 821, 930
Kushner RF, 957
Kuvibidila S, 944
Kwon JS, 104
Kwon J-S, 351

Labadarios D, 591
Laine L, 565
Lamberg-Allardt CH, 1082
Lamisse F, 829
Lands WEM, 47
Langenberg P, 304
Langhough R, 578
Lanson M, 829
Larsen LA, 164
Lashley E, 291
Laurin D, 98
Lavallée N, 628
Lavender R, 130
Law JS, 684
Laxova A, 578
Leadbetter J, 841
Leboy PS, 1209S
Lee SH, 111
Lehmann AB, 607
Lehto JH, 1082
Leichtmann GA, 548
Lerebours EC, 1041
Levander OA, 917
Levin B, 202S
Levine B, 179S
Levine M, 712, 1144S, 1157S, 1221S
Lieber CS, 976
Liehr JG, 1256S
Lifschitz CH, 565
Lifshitz F, 997
Lima AF, 539
Lindquist SA, 334
Lin M-C, 104
Lin W-J, 1041
Lipkin M, 188S, 209S
Liu EL, 1184S
Liu K, 930
Lloyd-Still JD, 1029
Lloyd T, 1005
London SJ, 340
Lönnerdal B, 152, 1017, 1065
Lopez CY, 539
Lopez R, 760
Lucas CP, 321
Lupien P-J, 98
Lusiani L, 586
Lutes V, 81
Lynch PM, 202S
Lynch SR, 717

MacKinnon MJ, 93
MacLean WC Jr, 767
Maclure M, 649
MacMahon B, 649
Mahan J, 425
Mahé S, 534
Maheshwari N, 209S
Mains RE, 1153S
Makishima R, 1101
Mann JI, 841
Manolio TA, 930
Manore MM, 41
Manson J, 172
Marcus MS, 578
Marcus SL, 1292S
Margolis SA, 1315S
Mariotti A, 370
Mark DA, 957
Marks L, 395, 402
Marliss EB, 123
Martini MC, 1041
Martin J-C, 829
Massé J, 610
Matkovic V, 245S, 425
Mattson DE, 764, 766, 769
Mattson FH, 701
Maughan RJ, 18
Mayfield SR, 30, 296
Mazess RB, 170
McAdam PA, 917
McArdle AH, 1087
McArdle WD, 175
McCabe GP, 657
McCarron DA, 215S
McDermott TM, 988
McNeill G, 18
McNutt KW, 1
Meadows GG, 1284S
Meiborg G, 736
Melanson KJ, 774
Mendeloff AI, 175
Mertz W, 175, 291
Messina M, 762
Messing B, 534, 560
Metsa-Ketelä TK, 1082
Miller E, 701
Milton RC, 568
Minor RR, 1184S
Mischler EH, 578
Mitchell ME, 814
Moe P, 506
Mohammadpour H, 346
Molla AM, 745
Monsen ER, 1
Moorjani S, 98
Moreau L, 829
Morris CD, 215S
Morris ER, 291
Morrow F, 774
Mosekilde L, 266S
Murgatroyd PR, 788
Murphy S, 611
Murthy KK, 944
Muskiet FAJ, 736
Muskiet FD, 736
Mussalo-Rauhamaa MH, 1082
Must A, 773, 955

Nadeau A, 628
Naesh O, 431
Nagatsu T, 1298S
Nagel R, 553
Nair PP, 684, 896
Nakahara S, 414
Neifert M, 81
Nelson DA, 281S
Neville MC, 69, 81
Newmark HL, 206S, 209S
Niimi H, 1298S
Niki E, 1119S
Nishikimi M, 1203S
Nishimune T, 414
Niyongabo T, 829
Njus D, 1179S

Ocana A, 141
O'Connor DL, 761
O'Connor M, 997
Odeleye OE, 430
Oeltgen PR, 678, 836, 936
Oh SY, 689
Okada H, 1093
O'Keefe EA, 130
O'Keefe SJD, 130
Okunieff P, 1281S
Ollivier V, 118
O'Neal DS, 678
Oparil S, 227S
Owen GM, 763

Pacifici M, 1209S
Pagnan A, 586
Paietta E, 1292S
Pang E, 668
Panlasigui LN, 871
Pappas T, 623
Park CH, 1241S
Park JHY, 346
Park YK, 750
Parra H-J, 118
Parthasarathy S, 701
Patten R, 141
Patterson BH, 917
Patton BD, 326, 334
Pauling L, 1252S
Payette H, 478
Peacock M, 261S
Peden MC, 866
Pelletier V, 395, 402
Pencharz PB, 613
Percival SS, 1193S
Perez CM, 871
Perez R, 539
Peterkofsky B, 1135S
Peters EJ, 35
Peters JC, 10
Peters JH, 1302S
Peterson AR, 1236S
Petrylak DP, 1292S
Pianalto FS, 1302S
Picciano MF, 761
Pichard C, 489
Pierson HF, 1284S
Pierson RN Jr, 26
Pi-Sunyer FX, 783
Pitre D, 565
Podleski TR, 1184S
Polansky MM, 909
Pollitt E, 799
Pouliot M-C, 471
Poupon J, 951
Powell CA, 642
Poydock ME, 1261S
Prasad C, 432

Prentice AM, 608, 788
Prewitt TE, 304
Price KS, 7
Prior JC, 169
Pronk NP, 56
Pronk SJ, 56
Prud'homme D, 471
Puangco MA, 104

Rahaim JE, 635
Rahmanifar A, 657
Rahmathullah L, 568
Rao AV, 141, 860
Rasbach J, 81
Reaven P, 701
Rebouche CJ, 1147S
Recker B, 997
Reddy MB, 723
Reed GW, 10
Reiser S, 291
Repke JT, 237S
Rey J, 370
Ricour C, 370
Riddell-Lawrence S, 836
Rimm EB, 49
Ringer TV, 610
Ritz P, 855
Rivera C, 539
Rivera JA, 62
Rivlin RS, 177S, 288S
Roberts DCK, 668
Roberts P, 130
Roberts SB, 499, 774
Robson DS, 62
Rocchiccioli F, 370
Roche AF, 953
Rolls BJ, 988
Romijn JA, 311
Rose DP, 520
Rosner B, 49, 157
Rossander-Hultén L, 152, 1047
Rotrosen D, 1221S
Roullet C, 215S
Rudman D, 764, 769
Ryan AS, 516
Ryan JA, 610
Rybka WB, 1087
Ryue J, 689

Sachs C, 370
Sacks FM, 340
Saitoh S, 1101
Salazar G, 1011
Salpeter MM, 1184S
Saltman P, 927
Salzano AC, 707
Sanders ME, 610
Sandjaja, 799
Sandstead HH, 1
Sandström B, 152, 1065
Sarma PS, 696
Sartoris D, 927
Sato T, 1298S
Sauberlich HE, 1059, 1319S
Sauerwein HP, 311
Savaiano DA, 1041
Sawyer MB, 788
Schaeffer JM, 1005
Schanler RJ, 420
Schermer JG, 736
Schlundt DG, 10
Schmeisser D, 304
Schnakenberg DD, 164
Schoene N, 896
Schols AMWJ, 983
Schutz Y, 526
Schwarz RI, 1247S
Seacat J, 81
Seale J, 506
Segal KR, 26
Sentipal JM, 425
Sevanian A, 1129S, 1236S
Shaikh S, 745
Shamoto M, 1298S
Shapiro IM, 1209S
Sharp T, 10
Sheng H-P, 420
Sheppard L, 821
Sherman WM, 866
Sherrard DJ, 952
Sherry B, 878
Shike M, 952
Shimomura Y, 1101
Shimpo K, 1298S
Shulman RJ, 565
Siguel E, 340
Simopoulos AP, 175, 438, 771
Sitrin MD, 548
Skikne BS, 1077
Skinner JS, 41
Slasky BS, 509
Slattery ML, 930
Smart RC, 1266S
Smith KT, 927
Smith MM, 997
Smith SF, 678
Smith SM, 729
Snook JT, 104, 351
Snyder EA, 814
Snyder JD, 745
Soeters PB, 983
Solomons NW, 539
Sondel SA, 578
Søndergård K, 266S
Sorgato F, 586
Speizer FE, 49, 157
Spiller GA, 615, 771
Spyckerelle Y, 884
Stadtman ER, 1125S
Stallings VA, 957
Stampfer M, 172
Stampfer MJ, 49, 157, 340
Stauber PM, 878
Steele PD, 291
Stehbens WE, 431
Steinberg D, 701
Steinke FH, 98
St Jeor ST, 957
Storch KJ, 377, 386
Strauman J, 1292S
Strause L, 927
Strong LE, 520
Sumimoto T, 414
Superko HR, 599
Suzuki M, 1101
Swanson CA, 917
Swendseid ME, 1302S

Taguchi S, 414
Tai MM, 783
Takeuchi T, 1298S
Tamura T, 761, 1319S
Tanudjaja TK, 553
Tarasuk V, 464
Tasaki Y, 1101
Taveroff A, 1087
Taylor PR, 896, 917
Tershakovec AM, 1071
Theodorou C, 591
Thériault G, 628
Thijssen JHH, 805
Thompson LU, 871
Thuillier F, 534
Thulasiraj RD, 568
Todesco T, 860
Tokuoka T, 1209S
Tomé D, 534
Travis LB, 649
Tremblay A, 471, 506
Truswell AS, 606
Tsao CS, 1274S
Tsay R, 499
Tsui JC, 291
Turnlund JR, 1059

Uauy R, 296
Umezawa H, 1298S
Underwood BA, 568, 707

Vanderhoof JA, 346
VanderJagt DJ, 878
Vanderpool HY, 1
Vanderslice JT, 1323S
van Duuren R, 805
Van Horn L, 930
Vanltallie T, 172
Van't Veer P, 805
Varela RM, 707
Vazquez JA, 970
Veillon C, 917
Vesterinen MK, 1082
Vezina C, 141
Villar J, 237S
Vio F, 1011
Visek WJ, 957
Visonà A, 586
Viveros OH, 1163S
Vlachonikolis I, 591
Vuksan V, 141

Wachs TD, 657
Wagner DA, 377, 386, 395, 402, 408
Waidelich D, 296
Walker MA, 1005
Walker SP, 642
Wander RC, 326, 334
Wang J, 26
Wang Y, 1157S
Wapnir RA, 175
Wardlaw GM, 104, 351, 425
Wargovich MJ, 202S
Warren RA, 7
Washko P, 1221S
Washko PW, 1157S
Watson RR, 430, 433, 609
Weaver CM, 763
Weinsier RL, 957
Welch RW, 1144S, 1157S
Weller SC, 1071
West CE, 606
Westermarck TW, 1082
Westerterp KR, 983
West KP Jr, 611
Whitehead R, 526
Whitley RJ, 936
Whyte RK, 903
Wiernik PH, 1292S
Wilder L, 696
Wilhjelm B, 431
Willett W, 172, 649
Willett WC, 157, 340
Willet WC, 49

Williams PT, 599
Winick M, 957
Winterrowd GE, 610
Wisker E, 553
Witztum JL, 701
Wolever TMS, 141, 846
Wolfe RR, 35
Wood CL, 936
Wood PC, 599
Wood SM, 1319S
Wootton JAM, 1184S
Wouters EFM, 983
Wright DA, 866
Wyss JM, 227S

Yagi K, 1203S
Yakushiji T, 414
Yamada K, 1298S
Yanelli K, 1188S
Yang R-H, 227S
Yetley EA, 750
Yiu SH, 871
Young E, 215S
Young VR, 377, 386, 395, 402, 408, 499, 774

Zakhari S, 47
Zawislak R, 951
Zech LA, 917
Zeigler JA, 936
Zello GA, 613
Zhang JZ, 1302S
Ziegler RG, 1315S
Zonderland ML, 805
Zu J, 1179S